

ARTICLE
BY
MARSHALL
McLUHAN



MIND YOUR MEDIA, MEN, OR
YOU'LL FIND YOURSELVES
CATCHING A COLD ENVIRONMENT—AND
SUFFERING FROM OVEREXPOSURE

THE REVERSAL OF THE OVERHEATED IMAGE

"The bark is still there, but the molars are gone."

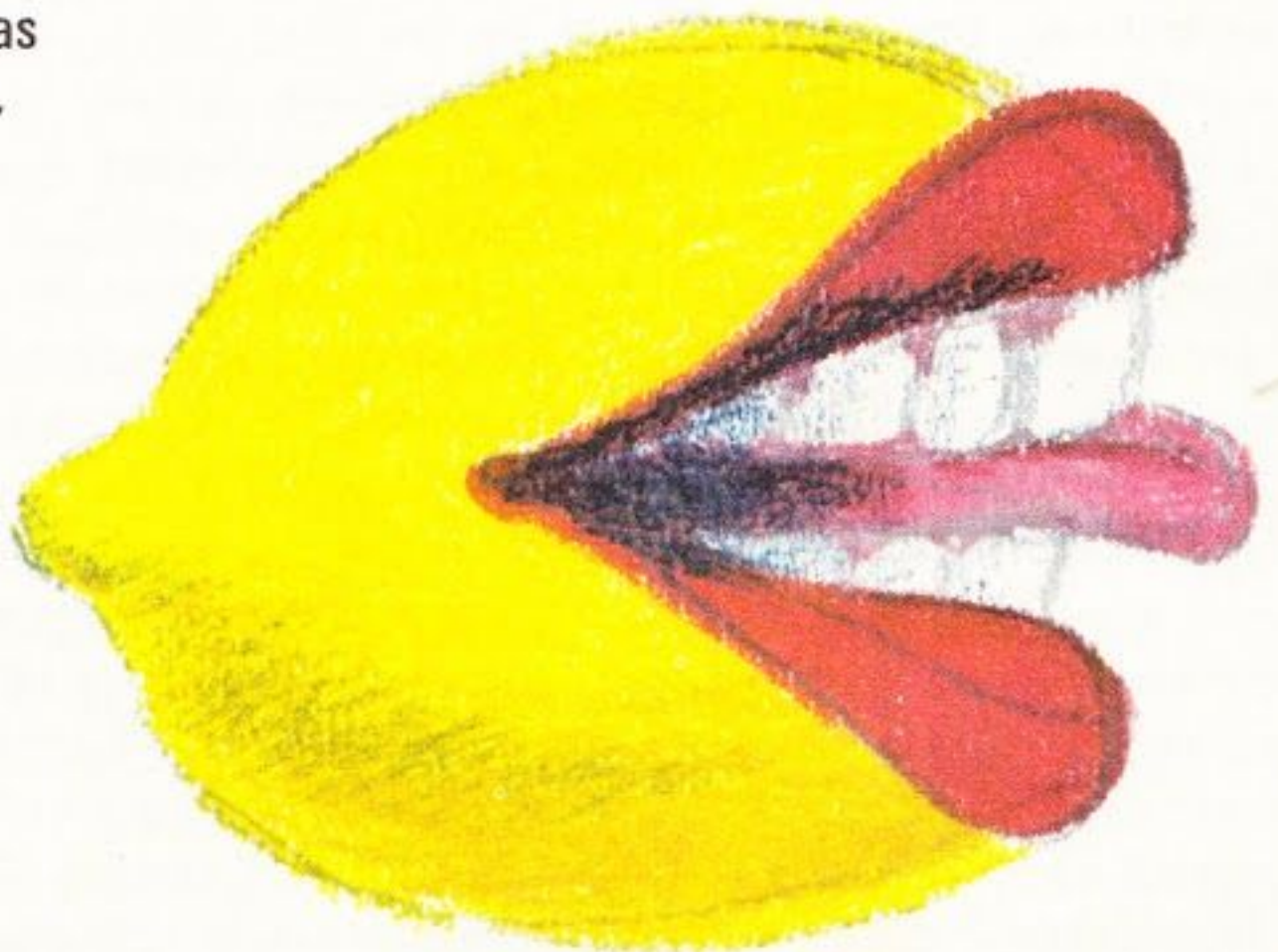
The Avis ad reads: **"We try harder."**

The Electric Circus ad reads: **"We try softer."**

The big reversal of our time is the flip from a service environment of "hardware" to a service environment of "software." By 1820, well before the telegraph became commercial, England had achieved hardware service environments on a considerable scale. Not just the press and cheap books ("The true university of these days is a collection of books"—Carlyle) but a national postal service based on hard-surface post roads. The application of steam power to printing and manufacture, to boat and train, was well under way. All of these environmental services were tied into metropolitan concentrations and marketing based on uniform pricing and currency. (The LSD of those days meant an outer trip—pounds, shillings and pence: hard money.) The acceleration of hardware technologies assured centralization of power and management, just as the much greater electronic speed-up today ensures the reverse pattern in business and politics, in culture and education, in war and peace. Mechanical, industrial or hardware service environments—print, post, rail or plane, for example—are "hot" because they are tightly tied together as bureaucratic organizations. On the other hand, software environments of information are pervasive, unobtrusive and as decentralized as telephone or radio. Hardware is specialized, requiring much fragmentation of skills. Software is generalized, requiring an interrelated awareness of whole environments. The new word is "ecology." The organization chart is gone. Today, the higher a man climbs in an organization, the less he has to do with its operation. By the time he reaches the top, he's a dropout, like L.B.J. Had Robert Kennedy survived the assassin's bullets and been a Presidential candidate in November, he would automatically have become President. As a cripple, he would have been much "cooler." F.D.R., as a cripple, was not a mere leader. He was an emperor. Seated in his wheelchair, he acquired the imperial status of Buddha or Raymond Burr's Ironside. A man standing on his two feet can be a leader. That's a hot image. But he must shout, trying to find an audience. An emperor, seated in state, doesn't need to find an audience. He *gives* audience. He wears his audience, the whole nation, as his mask of power. Of course, even this posture, pushed to an extreme, defeats itself by

reversal. Milton understood this very well in presenting his image of Satan in the opening of book two of *Paradise Lost*: "High on a throne of royal state, which far/Outshone the wealth of Ormus and of Ind./Or where the gorgeous East with richest hand/Showers on her kings barbaric pearl and gold,/Satan exalted sat, by merit rais'd/To that bad eminence..." As Antony Jay put it in *Management and Machiavelli*: "The emperor is the stage beyond the creative leader, the position that a few creative leaders graduate to, and this ability to . . . harness the most powerful and influential people to the common cause is the distinguishing

feature." The emperor, that is to say, creates new environments. These are the emperor's new clothes. They are invisible, because people are able to see only something their own size. Environments surround them and numb them, eluding the perception of all except little Peter Pans. Today, private business can become an invisible environment so large as to be the equivalent of a national state. As makers of service environments, businesses shape and educate our perceptions invincibly and invisibly. The Greek word for environment is *perivallo*—"to hit from all sides at once."



In this age of information environments of electric software, it is the service environments that have become the teaching machines. Education and culture have become the major part of the business enterprise itself, flipping the entire image of business. One sees ads such as: "ADOPT A COLLEGE." Business can now take over public education, even though Government is not allowed to assist private education. The laws preventing public subsidies to private educational institutions belong to the old hardware service environment of the pre-electric age. Now that the environment itself has become a major teaching machine, the image of learning has been reversed. The learner becomes hunter, explorer, not consumer. In the electric age, education can no longer be goal-oriented, not in the world of total field information and systems engineering. Peter Drucker, who has had several diverse careers, says: "Here I am, fifty-eight, and I still don't know what I'm going to be when I grow up." He recommends, for all career men, an abrupt change into a totally different career at the age of 40. Language professors would switch to engineering or medicine, and vice versa. **The children in Watts were heard to say: "Why should we go back to school and interrupt our education?" Our 19th Century school and college systems, based on fragmented subjects and classified data, which derive from the old hardware environment, cannot relate to the new integral electric environments of information. Sir Francis Drake put a girdle around the world in the 16th Century, but Sputnik enclosed the world in a man-made environment of information, turning it into an old nose cone, a piece of Camp, an archaeological museum. Joyce called it the "Willingdone museyroom." The allusion to Wellington draws attention to the fact that war and weaponry have been the major drives in creating this planetary museum of artifacts. The willing aspect of the phrase expresses Joyce's concern with the "burning would" that "is come to dance inane." Men seem to be impelled by an inner drive that jitters them into the most self-destructive situations. Macbeth's fear was his "burning would" that drove him to Dunsinane. Radio in the 1920s created a totally new kind of world environment, substituting the ear for the eye, as it were. This was one of the great reversals of imagery in all human history. Literacy had extended the power of the eye, giving it dominance over the other senses. Phonetic literacy created visual, "rational" space. Never had any culture experienced this kind of space until Fifth Century Athens. Eric Havelock's *Preface to Plato* comments at length on the revolution**

by which the new literati, led by Plato, attacked the educational establishment of the bards. Homer and Hesiod had long been the educators of the Greek youth, teaching them "history as she is harped." Plato simply denounced this program in the interest of "abc-ed-mindedness." Joyce's quip here draws attention to the inevitable price paid for visual dominance over the senses: "an eye for an ear." W. H. Auden said, "A professor is a man who talks in other people's sleep." The absent-minded professor is simply a sensory specialist with a *fixed* point of view, in space and in time. In a literate culture, even semiliterate scientists ape this form of literacy, taking great "precautions of a public kind" in order to appear as precise and correct as any grammarian. The new world environment of radio evoked a unique creative response from the American Negro. Jazz is not only close to speech, song and dance but it is syncopated. The world of the ear offers none of the continuity and connectedness known only to the eye. The discontinuities of the electric "space-time" had received much advance billing in the arts before Einstein. Lewis Carroll's Alice flipped out of the hardware world of visual space, of visual uniformity and connectedness, when she went *Through the Looking-Glass*. But the





telegraph press itself had, even earlier, reversed the pattern of the old book and editorial image. At electric speeds, a point of view is meaningless, even in a newspaper. News items are necessarily unconnected except by a date line. The newspaper mosaic has no story line. Like syncopated jazz or poetic symbolism, it is discontinuous. Negro jazz was quickly accepted in the capitals of the world. Paradoxically, the Negro integrated the world before anybody ever thought of integrating him. In the TV age, the Beatles seem to have made the most effective response to this "cool" medium. They have gone Oriental, even as the East goes West. The Negro brought in evangelical folk music, but the bottom-wagging Twenties did not seek any inner trip. The Twenties accepted the dominance of the ear, of song and dance, over literacy and civilization. Even the highbrow arts of the Twenties were "Jung and easily Freudened," and moved enthusiastically toward retribalization of society. The famous family of Stein (Gert and Ep and Ein) presents a good cross section of the new tribalism created by the radio environment. When radio married the movies, when the movies started to talk, the reversal of imagery from the new heating-up process fed the drive toward the reverse TV image. The extreme coolness and tactility of TV has received its most impressive testimonial in a new painting by Salvador Dali. It appears on the cover of TV Guide for June 8, 1968. Two TV screens appear on two thumbnails. The thumbs are widely separated, looking like cracked sculpture (tactile space is the space of the interval, the icon, the contour). With the advent of TV, the old hardware world began to crumble. Radio and movies had at first seemed to provide the old mechanized world with a hotted-up image even more glamorous than before. It was the moment of reversal. Even sex has flipped. Hollywood photography hotted-up glamor and kisses and long-stemmed American beauties. Skirts were at the knee: "She rolls her stocking at the knee/And when she sits down, you can see/There ain't no flies on Auntie." The greatly improved photography of the Sixties has pushed the sex image all the way into nonsex. The gatefold cuties in PLAYBOY are sculptural and cool, as nudes must be. As photography goes hi-fi, visual qualities yield to texture and tactility. The hot becomes cool. The detached image, full of visual fantasy and desire ("dreams that money can buy") becomes an aesthetic object of multi-sensuous involvement. Real cool. The miniskirt is not hot or sexy. It is a tribal costume, long worn by boys, men and women alike. It is not a fashion. No more disconcerting reversal of image could be imagined. The worlds of reversals created by speeded-up information movement affect every sphere of life. Each could do with a book. There already is a book on *The De-Romanization of the Roman Church*. When it took months for bishops to travel to Rome and back, the consensus of the faithful, which is called "papal infallibility," was totally different from the same image in the jet age. In the old hardware world, "all roads led to Rome." In the jet age, there are no roads. Rome is in our sitting room as much as Vietnam. The new participation of the faithful in the decision-making process exceeds even the fragmentation of Protestant literacy. Rome seems to be set to perform a judo flip, by which all the schismatic churches fling themselves back into her arms. It is well known that leaders no longer come up from inside an operation, commercial or political. The old bureaucratic structures of big business and civil service

are too fragmented to produce leaders. The leader *has* to be a "dark horse" from outside the old type of structure. Today, the only person who can run a big business is one who has had much involvement in a small business. It is the same with the big city. Big cities were created by the old hardware of steamship and railway. They were highly centralized structures, like the huge armies of World War One. The motorcar tore the big cities apart—into suburbs. The jet planes simply bypassed the cities, leaving them to become ghettos. It is said that three times the population of Chicago leaves O'Hare Airport each year. **The decentralization of war came with radio in World War Two. Churchill and Roosevelt were big tribal chieftains who used the fireside as the firing line. World War Two decentralized via radio into guerrilla tactics. As for World War Three, a student of mine wrote: "The Vietnam war is the first world war ever fought on American soil." Thanks to TV, parents have seen their sons killed on the seven-o'clock news. In a word, a hot war cannot be endured on a cool medium. This also applies to politics. In all countries, the party system has folded like the organization chart. Policies and issues are useless for election purposes, since they are too specialized and too hot. The shaping of the candidate's integral image has taken the place of discussing conflicting points of view. The world of education presents the same kind of reversal. Institutions established to prepare students for goals by specialist courses and credits are being rejected and even defied by their clients. The TV generation wants participation in the educational process. It does not want packages. The students want problems, not answers. They want probes, not exams. They want making, not matching. They want struggle, not goals. They want new images of identity, not careers. They want insights, not classified data. At IBM, a favorite slogan is "Information overload = pattern recognition," or sudden structural awareness. A recent report about a**

dilemma in the Pentagon concerned the excessive influx of data collected by agents of the CIA and others. So great is the unread backlog that even the *Pueblo* can get lost in the IN basket. There is imminent danger of pattern recognition even in the Pentagon, the biggest filing cabinet in the world. The new Reading Dynamics or "high-speed reading" tends to build on the principle of overload as pattern recognition. The faster one reads, as every exam crammer has discovered, the more one perceives and the more one retains. (But, of course, there is the exception: "I'll never forget what's-his-name.")

The information theorists are fond of pointing out that a telephone book contains no information. There are too many data and no patterns. In the electric environment of fast-changing, total-field information, a fixed point of view is as useless as a specialty. Today, the training of an engineer or a doctor is obsolete upon graduation. The result is that the artist replaces the bureaucrat. The ivory tower supplants the control tower. Electronic man becomes a hunter, a prober once more. He begins to live by "feedforward," not "feedback." (The Eskimo hunter proved by far the best jet-engine mechanic at Gander in World War Two.) As Antony Jay points out, when you are on an economy drive, remember:

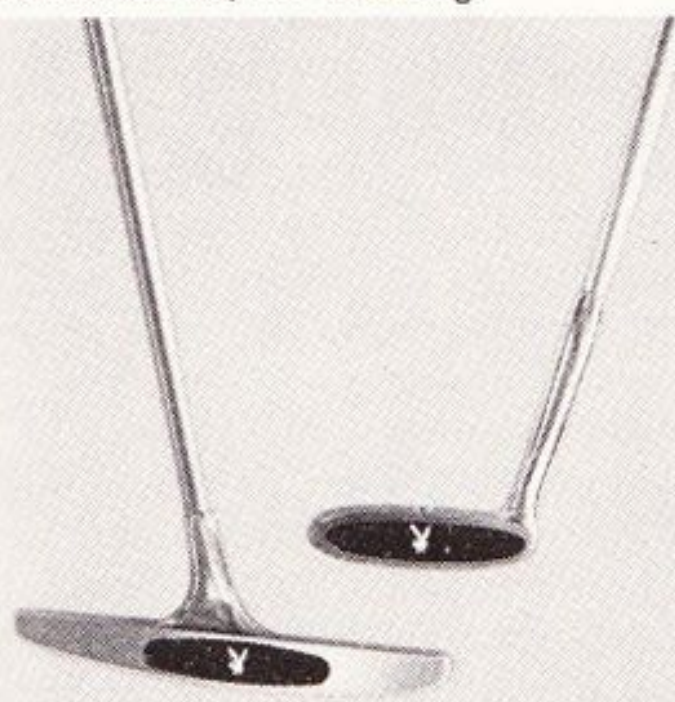
"Economy does not need an actuary, it needs a visionary." In any operation where

(**FLIP** TO PAGE 245)



the score trimmers

Improve your game with either of Playboy's great putters. Choose the original mallet head or the new, left- and right-handed blade-style longhorn. Both boast non-slip custom grip, steel shaft, Rabbit-crested solid-brass head and black leather club cover. Mallet head, \$25; Blade-style, \$22. Use order No. MY0801. Please add 50¢ for handling.



Shall we send a gift card in your name? Please send check or money order to: **Playboy Products**, The Playboy Building, 919 N. Michigan Ave., Chicago, Ill. 60611. Playboy Club credit keyholders may charge.

the bare essential

A half ounce of Playboy's own and she'll be yours forever. In essence, the perfect gift. Use order no. TX20001, \$15. Please add 50¢ for handling.



Shall we send a gift card in your name? Please send check or money order to: **Playboy Products**, The Playboy Building, 919 N. Michigan Ave., Chicago, Ill. 60611. Playboy Club credit keyholders may charge.

sheer fancy

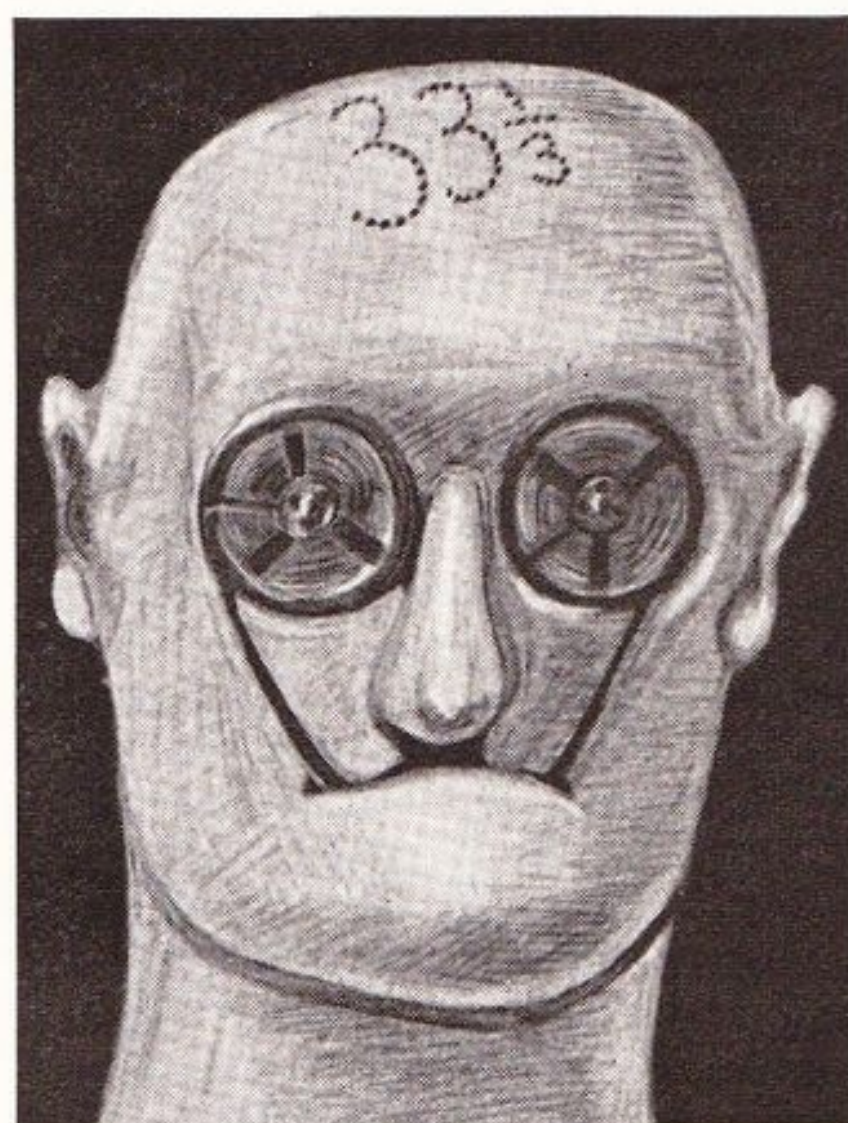
Sleek satin and frilly French lace fashion the Playmate Garter. Black or white. Use order no. MW2000 \$2. Please add 50¢ for handling.




Please send check or money order to: **Playboy Products**, The Playboy Building, 919 N. Michigan Ave., Chicago, Ill. 60611. Playboy Club credit keyholders may charge.

IMAGE (continued from page 134)

excellence and integrity are at stake, budgets are irrelevant. The bureaucrat will insist upon cheaper pencils and carbon paper, sending out messages such as that received by the deep-sea diver: "Surface at once. The ship is sinking." The principle of reversal of image and structure that accompanies every amplification of power applies everywhere, from trivial matters such as dance bands, reduced from 40 instruments to five by electric amplifiers, to the very pattern of human identity, reduced by data banks and computer memo-



ries to insignificance. The more that is publicly recorded about the actual existence of any person, the more he is diminished in his private existence. Like any public entertainer, he becomes his admirers or his recorders. By a commodius vicus of recirculation, this flips us back to the Electric Circus, in which music is no longer for listening to but for merging with. 



pillow talk

Behind your back or off the top of your head, Playboy's Pillow boasts at-home fashion sense. Made of 100% cotton poplin, cord edged and kapok filled, the Rabbit-crested throw pillow adds a decorative touch to an "in" pad. Also a kicky accent for dorm or deck. In black with permanently flocked white Rabbit head. Please order by product number MY32901, \$6, and add 50¢ for handling.

Shall we send a gift card in your name? Please send check or money order to: **Playboy Products**, The Playboy Building, 919 N. Michigan Ave., Chicago, Ill. 60611. Playboy Club credit keyholders may charge.



talking turtle

Fashion is at the top with the full turtle look. Flat knit of the finest zephyr wool, Playboy's Turtleneck Classic is double knit for twice the good looks. White, black, gold, medium charcoal gray, marine blue or brown, crested with subtly stitched Rabbit. Comes with snap-shut storage bag. S, M, L, XL sizes, WY10801, \$30. Please use product number and add 50¢ for handling.

Shall we send a gift card in your name? Please send check or money order to: **Playboy Products**, The Playboy Building, 919 N. Michigan Ave., Chicago, Ill. 60611. Playboy Club credit keyholders may charge.